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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,157	01/11/2006	Nobuhiro Sato	062800-0116	6021
22428 7590 09/12/2008 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007				
EXAMINER				
MANCUSO, HUEDUNG XUAN CAO				
ART UNIT		PAPER NUMBER		
2821				
MAIL DATE		DELIVERY MODE		
09/12/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/564,157

**Applicant(s)**

SATO ET AL.

**Examiner**

HUEDUNG Cao MANCUSO

**Art Unit**

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18, 25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18, 25 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 1/11/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 9-18, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazunori (JP 09-036651 ) in view of Nakazawa ( US 5561438).

As to claim 1, Kazunori teaches a wearable receiver comprising: a receiving unit that includes a demodulating unit that receives a reception radio wave in a frequency modulation multiplex telecasting and that demodulates the reception radio wave to output; a display unit 3 that displays text information output by the demodulating unit; an antenna 9 for receiving and transmitting a frequency in the frequency modulation band; and a base plate 11 that accommodates the receiving unit, the display unit, and the antenna, and that is structured to be worn on an arm see Kazunori (paragraph [0017,0034,0035]), wherein the antenna includes a magnetic member, and an antenna copper plate arranged on a periphery of the magnetic member so that the antenna copper plate wraps nearly one around the magnetic member which Kazunori does not explicitly disclose. However, Nakazawa teaches such the antenna includes a magnetic member, and an antenna copper plate arranged on a periphery of the magnetic member so that the antenna copper plate wraps nearly one around the magnetic member is widely used in the art see Nakazawa (figures 1-2, and col. 3, line 46-col. 4, line 62). It would have been obvious to one

of ordinary skill in the art at the time the invention was made to combine Nakazawa's teaching with Kazunori's because both of the teaching is directed to the antenna system and it will make for more efficient and usefull system.

As to claims 2-4, wherein the antenna is arranged on the base plate at a position excluding positions at which the receiving unit and the display unit are arranged, wherein an opening hole for letting the reception radio wave pass through with respect to the antenna is arranged by forming an opening at the position at which the antenna is arranged on the base plate, wherein the magnetic member has an inclined portion that is formed corresponding to a shape of the base plate by cutting off a portion of the periphery on which the antenna copper plate is wrapped Kazunori (figures 1-12, and paragraph [0017,0034,0035,0045-0053,]).

As to claim 5, wherein the magnetic member has an arc-shaped portion having a predetermined diameter, corresponding to a shape of the base plate, on the periphery on which the antenna copper plate is wrapped see Nakazawa (figures 1-2, and col. 3, line 46-col. 4, line 62).

Claims 6, 7, 9, 25, and 26 are similar in scope to claims 1-5; therefore, they are rejected for the same reason.

As to claims 10-18, wherein the magnetic member has an inclined portion formed by cutting off a portion of the periphery on which the antenna copper plate is wrapped; the magnetic member has an arc-shaped portion having a predetermined diameter on the periphery on which the antenna copper plate is wrapped; wherein the height of the antenna copper plate is equal to the height of the magnetic member; wherein the height of the antenna copper plate is smaller

than the height of the magnetic member; wherein the height of the antenna copper plate is larger than the height of the magnetic member see Nakazawa (figures 1-4).

As to claims 15-18, wherein the ratio of the height of the magnetic member to the height of the antenna copper plate is from 1 to 2; the ratio of the height of the magnetic member to the height of the antenna copper plate is from 1.2 to 1.3; the magnetic material is formed with a material of which a magnetic permeability is or lower and a magnetic permeability is 0.03 or lower at a frequency in the frequency modulation band; wherein main components of the magnetic material are iron oxide (Fe<sub>2</sub>O<sub>3</sub>) and nickel oxide (NiO) which Nakazawa and Kazunori do not disclose. However, the exact shape or material or size are something that one of ordinary skill in the art would know how to best design for the optimum operation of the device when taking into consideration the size available for the device and the preferred cost in making the device.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Nakazawa (US 5561438 A1).

As to claim 8, Nakazawa teaches an antenna comprising: a magnetic member, and an antenna copper plate that is arranged on a periphery of the magnetic member so that the antenna

copper plate wraps nearly one around the magnetic member see Nakazawa (figure 1-4, and col. 3, line 46-col. 4, line 62).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUEDUNG Cao MANCUSO whose telephone number is (571)272-1939. The examiner can normally be reached on 6:30 am - 4:00 pm.

4. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Owens can be reached on (571) 272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Huedung Cao Mancuso/  
Examiner, Art Unit 2821